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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,977	09/30/2003	Jeffrey Douglas Brown	AUS920030611US1	4952

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EXAMINER	
GREY, CHRISTOPHER P	

ART UNIT	PAPER NUMBER
2416	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/674,977	BROWN ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER P. GREY	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,14 and 17-32* is/are pending in the application.

4a) Of the above claim(s) *14 and 29-32* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 17-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-3,14 and 17-32* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1, 2, 3, 17-28 drawn to an apparatus and method using a centralized bandwidth management table, plurality of load shapers and a local bandwidth management, in order to manage the bandwidth using token increments and decrements within the tables, classified in class 370 subclass 230.1

II. Claims 14, 29-32 drawn to classified in class a method of BW management comprising submitting a request, assigning class identities and designating allowable BW from an assignment entity, supplying the ID's to a plurality of load shapers and permitting transmission of best effort data packets over a communication path subclass classified in class 370, subclass 395.43.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination of Group II has separate utility such as for the assignment of class identities. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

3. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

(a) the inventions have acquired a separate status in the art in view of their different classification;

(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention**.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. During a telephone conversation with Scott Richardson on March 27, 2009 a provisional election was made without traverse to prosecute the invention of Group I, claims 1, 2, 3, 17-28 . Affirmation of this election must be made by applicant in replying to this Office action. Claims 14, 29-32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 3, 18, 19, 20, 22, 23, 24, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voellm et al. (US 2004/0267932) in view of Bly et al. (US 20040042399), hereinafter referred to as Bly.

Regarding claim 1, Voellm discloses a plurality of load shapers **(fig 2, where each client shapes its load based on credit messages from the server as indicated in Para 0031)** configured to:

maintain a local bandwidth management table **(fig 3, 320 shows table with credits used info)** comprising a local token count **(fig 3, credits used)** for each source entities **(fig 1, where each client A-C is equivalent to a source entity)**;

receive a data packet from a source entity **(Para 0029, client receives a new request to perform a transaction)** transmit the data packet over a multiplexed communication path **(fig 2, where the clients used the credits that are allocated to the connection to send data tot eh buffers of the server, and Para 0021 supports an protocol, which includes a multiplexing protocol)** if the local token count of the source entity is at least one **(Para 0026, where the client needs a certain number of credits in order to send a request, where the limit cannot be exceeded)**; and

decrement the local token count of the source entity in the local bandwidth management table in response to the transmission **(fig 3, and Para 0026, where the credits used are maintained in the table of fig 3, thus a decrement is applied when each credit is used to send a request or data)**; and

Bandwidth Management Controller **(fig 2, server)** configured to:

maintain a centralized bandwidth management table (fig 5 shows an info table) comprising a base token count **(fig 5, where the combination of credit limits and credits used can be manipulated in order to achieve a base token count, and furthermore the claim does not define the structure or specification of such a count)** for each of the plurality of source entities **(fig 5, shows info for each client source)**,

Voellm does not specifically disclose one of the plurality of classes wherein a minimum bandwidth is reserved for each of the plurality of classes of source entities and the base token count increases at a rate corresponding to the minimum bandwidth; and

wherein: the plurality of load shapers is further configured to request a token for the class of the source entity from the Bandwidth Management Controller in response to the transmission; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is at least one by: providing a token and decrementing the base token count for the class of the source entity.

Bly discloses one of the plurality of classes **(Para 0038, high precedence versus best effort and Para 0042 for classification of incoming traffic)** wherein a minimum bandwidth **(Para 0039 teaches a minimum amount of credit, where credits define the amount of BW)** is reserved for each of the plurality of classes of source entities **(Para 0042 teaches the queues being classified dependent on the classified incoming traffic)** and the base token count increases at a rate corresponding to the minimum bandwidth **(Para 0039, where credits are allocated from the burst group allocation table which holds the number of base token counts as shown in figs 7 and 8, where the allocation is based on a minimum guaranteed BW);** and wherein:

the plurality of load shapers **(load shapers are shown within VoeIIm)** is further configured to request a token for the class of the source entity **(Para 0043 shows requesting credit/BW)** from the Bandwidth Management Controller **(Para 0043, request is made to credit allocation circuit which is made equivalent to a BMC shown in fig 4)** in response to the transmission **(fig 8, where a loop exists, thus the request of 84 is made after a transmission in 90 as a loop exists)**;

and the Bandwidth Management Controller **(fig 3 shows burst group allocation 51 equivalent to BMC)** further configured to respond to the request **(fig 8, 86 shows response)** if the base token count for the class of the source entity is at least one by: providing a token **(fig 8, burst group assigns credit from burst group allocation table and Para 0030 shows that allocation is made only if the allocation table has any credits available, thus the amount of credits must be more than 1)** and decrementing the base token count for the class of the source entity **(fig 4 shows a burst allocation table which keeps a record of the allocation of burst group, therefore when the credits are allocated, this allocation is noted/decremented from the bandwidth allocation table).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the client/server credit allocation scheme of Voellm, as taught by Bly, since stated in Para 0002-0004 that such a modification would improve the lack of scalability, cost per queue for the shaping and the ability to shape traffic.

Regarding claim 2, Voellm does not specifically disclose the centralized bandwidth management table further comprises a standby token count for each of the plurality of classes of source entities; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is zero and the standby token count for the class of the source entity is at least one by: providing a token and decrementing the standby token count for the class of the source entity.

Bly discloses the centralized bandwidth management table further comprises a standby token count for each of the plurality of classes of source entities; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is zero and the standby token count for the class of the source entity is at least one by: providing a token and decrementing the standby token count for the class of the source entity (Para 0039 discusses unused credit which can be made equivalent to standby tokens, i.e. Para 0030 shows that request are made to the burst groups/classes, where credits are allocated if the burst group has credit to give, therefore one skilled in the art can appreciate that when only 1 credit remains, this 1 credit is equivalent to a standby token, thus 1 when 1 credit remains, 0 base tokens are present and 1 standby token exists).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the client/server credit allocation scheme of Voellm, as taught by Bly, since stated in Para 0002-0004 that such a modification would improve the lack of scalability, cost per queue for the shaping and the ability to shape traffic.

Regarding claim 3, Voellm discloses a plurality of load shapers **(fig 2, where each client shapes its load based on credit messages from the server as indicated in Para 0031)** configured to:

maintain a local bandwidth management table **(fig 3, 320 shows table with credits used info)** comprising a local token count **(fig 3, credits used)** for each source entities **(fig 1, where each client A-C is equivalent to a source entity)**;

receive a data packet from a source entity **(Para 0029, client receives a new request to perform a transaction)** transmit the data packet over a multiplexed communication path **(fig 2, where the clients used the credits that are allocated to the connection to send data tot eh buffers of the server, and Para 0021 supports an protocol, which includes a multiplexing protocol)** if the local token count of the source entity is at least one **(Para 0026, where the client needs a certain number of credits in order to send a request, where the limit cannot be exceeded)**; and

decrement the local token count of the source entity in the local bandwidth management table in response to the transmission **(fig 3, and Para 0026, where the credits used are maintained in the table of fig 3, thus a decrement is applied when each credit is used to send a request or data)**; and

Bandwidth Management Controller **(fig 2, server)** configured to:

maintain a centralized bandwidth management table (fig 5 shows an info table) comprising a base token count **(fig 5, where the combination of credit limits and credits used can be manipulated in order to achieve a base token count, and furthermore the claim does not define the structure or specification of such a count)** for each of the plurality of source entities **(fig 5, shows info for each client source)**,

Voellm does not specifically disclose one of the plurality of classes wherein a minimum bandwidth is reserved for each of the plurality of classes of source entities and the base token count increases at a rate corresponding to the minimum bandwidth; and

wherein: the plurality of load shapers is further configured to request a token for the class of the source entity from the Bandwidth Management Controller in response to the transmission; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is at least one by: providing a token and decrementing the base token count for the class of the source entity.

Bly discloses one of the plurality of classes **(Para 0038, high precedence versus best effort and Para 0042 for classification of incoming traffic)** wherein a minimum bandwidth **(Para 0039 teaches a minimum amount of credit, where credits define the amount of BW)** is reserved for each of the plurality of classes of source entities **(Para 0042 teaches the queues being classified dependent on the classified incoming traffic)** and the base token count increases at a rate corresponding to the minimum bandwidth **(Para 0039, where credits are allocated from the burst group allocation table which holds the number of base token counts as shown in figs 7 and 8, where the allocation is based on a minimum guaranteed BW);** and wherein:

the plurality of load shapers **(load shapers are shown within VoeIIm)** is further configured to request a token for the class of the source entity **(Para 0043 shows requesting credit/BW)** from the Bandwidth Management Controller **(Para 0043, request is made to credit allocation circuit which is made equivalent to a BMC shown in fig 4)** in response to the transmission **(fig 8, where a loop exists, thus the request of 84 is made after a transmission in 90 as a loop exists)**;

and the Bandwidth Management Controller **(fig 3 shows burst group allocation 51 equivalent to BMC)** further configured to respond to the request **(fig 8, 86 shows response)** if the base token count for the class of the source entity is at least one by: providing a token **(fig 8, burst group assigns credit from burst group allocation table and Para 0030 shows that allocation is made only if the allocation table has any credits available, thus the amount of credits must be more than 1)** and decrementing the base token count for the class of the source entity **(fig 4 shows a burst allocation table which keeps a record of the allocation of burst group, therefore when the credits are allocated, this allocation is noted/decremented from the bandwidth allocation table).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the client/server credit allocation scheme of Voellm, as taught by Bly, since stated in Para 0002-0004 that such a modification would improve the lack of scalability, cost per queue for the shaping and the ability to shape traffic.

Regarding claim 18, Voellm discloses wherein the local token count for each of the plurality of classes of source entities has a maximum count of two tokens (Para 0028, where the minimum number that can be assigned to the negotiable limit of the credits is 2).

Regarding claim 19, Voellm discloses wherein the plurality of load shapers is further configured to maintain a count of outstanding requests for tokens **(Para** 0026 shows outstanding transaction requests).

Regarding claim 20, Voellm does not specifically disclose the centralized bandwidth management table further comprises a standby token count for each of the plurality of classes of source entities; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is zero and the standby token count for the class of the source entity is at least one by: providing a token and decrementing the standby token count for the class of the source entity.

Bly discloses the centralized bandwidth management table further comprises a standby token count for each of the plurality of classes of source entities; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is zero and the standby token count for the class of the source entity is at least one by: providing a token and decrementing the standby token count for the class of the source entity (Para 0039 discusses unused credit which can be made equivalent to standby tokens, i.e. Para 0030 shows that request are made to the burst groups/classes, where credits are allocated if the burst group has credit to give, therefore one skilled in the art can appreciate that when only 1 credit remains, this 1 credit is equivalent to a standby token, thus 1 when 1 credit remains, 0 base tokens are present and 1 standby token exists).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the client/server credit allocation scheme of Voellm, as taught by Bly, since stated in Para 0002-0004 that such a modification would

improve the lack of scalability, cost per queue for the shaping and the ability to shape traffic.

Regarding claim 22, Voellm discloses wherein the local token count for each of the plurality of classes of source entities has a maximum count of two tokens (Para 0028, where the minimum number that can be assigned to the negotiable limit of the credits is 2).

Regarding claim 23, Voellm discloses wherein the plurality of load shapers is further configured to maintain a count of outstanding requests for tokens **(Para** 0026 shows outstanding transaction requests).

Regarding claim 24, Voellm discloses computer program product and code (Para 0016-0020) for performing the functions associated with :

a plurality of load shapers **(fig 2, where each client shapes its load based on credit messages from the server as indicated in Para 0031)** configured to:

maintain a local bandwidth management table **(fig 3, 320 shows table with credits used info)** comprising a local token count **(fig 3, credits used)** for each source entities **(fig 1, where each client A-C is equivalent to a source entity)**;

receive a data packet from a source entity **(Para 0029, client receives a new request to perform a transaction)** transmit the data packet over a multiplexed communication path **(fig 2, where the clients used the credits that are allocated to the connection to send data tot eh buffers of the server, and Para 0021 supports an protocol, which includes a multiplexing protocol)** if the local token count of the

source entity is at least one **(Para 0026, where the client needs a certain number of credits in order to send a request, where the limit cannot be exceeded)**; and

decrement the local token count of the source entity in the local bandwidth management table in response to the transmission **(fig 3, and Para 0026, where the credits used are maintained in the table of fig 3, thus a decrement is applied when each credit is used to send a request or data)**; and

Bandwidth Management Controller **(fig 2, server)** configured to:

maintain a centralized bandwidth management table (fig 5 shows an info table) comprising a base token count **(fig 5, where the combination of credit limits and credits used can be manipulated in order to achieve a base token count, and furthermore the claim does not define the structure or specification of such a count)** for each of the plurality of source entities **(fig 5, shows info for each client source)**,

Voellm does not specifically disclose one of the plurality of classes wherein a minimum bandwidth is reserved for each of the plurality of classes of source entities and the base token count increases at a rate corresponding to the minimum bandwidth; and wherein: the plurality of load shapers is further configured to request a token for the class of the source entity from the Bandwidth Management Controller in response to the transmission; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is at

least one by: providing a token and decrementing the base token count for the class of the source entity.

Bly discloses one of the plurality of classes **(Para 0038, high precedence versus best effort and Para 0042 for classification of incoming traffic)** wherein a minimum bandwidth **(Para 0039 teaches a minimum amount of credit, where credits define the amount of BW)** is reserved for each of the plurality of classes of source entities **(Para 0042 teaches the queues being classified dependent on the classified incoming traffic)** and the base token count increases at a rate corresponding to the minimum bandwidth **(Para 0039, where credits are allocated from the burst group allocation table which holds the number of base token counts as shown in figs 7 and 8, where the allocation is based on a minimum guaranteed BW);** and wherein:

the plurality of load shapers **(load shapers are shown within Voellm)** is further configured to request a token for the class of the source entity **(Para 0043 shows requesting credit/BW)** from the Bandwidth Management Controller **(Para 0043, request is made to credit allocation circuit which is made equivalent to a BMC shown in fig 4)** in response to the transmission **(fig 8, where a loop exists, thus the request of 84 is made after a transmission in 90 as a loop exists)**;

and the Bandwidth Management Controller **(fig 3 shows burst group allocation 51 equivalent to BMC)** further configured to respond to the request **(fig 8, 86 shows response)** if the base token count for the class of the source entity is at least one by: providing a token **(fig 8, burst group assigns credit from burst group**

allocation table and Para 0030 shows that allocation is made only if the allocation table has any credits available, thus the amount of credits must be more than 1) and decrementing the base token count for the class of the source entity **(fig 4 shows a burst allocation table which keeps a record of the allocation of burst group, therefore when the credits are allocated, this allocation is noted/decremented from the bandwidth allocation table).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the client/server credit allocation scheme of Voellm, as taught by Bly, since stated in Para 0002-0004 that such a modification would improve the lack of scalability, cost per queue for the shaping and the ability to shape traffic.

Regarding claim 25, Voellm does not specifically disclose the centralized bandwidth management table further comprises a standby token count for each of the plurality of classes of source entities; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is zero and the standby token count for the class of the source entity is at least one by: providing a token and decrementing the standby token count for the class of the source entity.

Bly discloses the centralized bandwidth management table further comprises a standby token count for each of the plurality of classes of source entities; and the Bandwidth Management Controller is further configured to respond to the request if the base token count for the class of the source entity is zero and the standby token count

for the class of the source entity is at least one by: providing a token and decrementing the standby token count for the class of the source entity (Para 0039 discusses unused credit which can be made equivalent to standby tokens, i.e. Para 0030 shows that request are made to the burst groups/classes, where credits are allocated if the burst group has credit to give, therefore one skilled in the art can appreciate that when only 1 credit remains, this 1 credit is equivalent to a standby token, thus 1 when 1 credit remains, 0 base tokens are present and 1 standby token exists).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the client/server credit allocation scheme of Voellm, as taught by Bly, since stated in Para 0002-0004 that such a modification would improve the lack of scalability, cost per queue for the shaping and the ability to shape traffic.

Regarding claim 27, Voellm discloses wherein the local token count for each of the plurality of classes of source entities has a maximum count of two tokens (Para 0028, where the minimum number that can be assigned to the negotiable limit of the credits is 2).

Regarding claim 28, Voellm discloses wherein the plurality of load shapers is further configured to maintain a count of outstanding requests for tokens **(Para** 0026 shows outstanding transaction requests).

7. Claims 17, 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voellm et al. (US 2004/0267932) in view of Bly et al. (US 20040042399), hereinafter referred to as Bly in view of Jeffries (US 20040062259).

Regarding claim 17, The combined teachings of Voellm and Bly do not specifically disclose linearly increase the standby token count for each of the plurality of classes of source entities when the communication path is not congested; and exponentially decrease the standby token count for each of the plurality of source entities when the communication path is congested.

Jeffries discloses linearly increase the standby token count for each of the plurality of classes of source entities when the communication path is not congested; and exponentially decrease the standby token count for each of the plurality of source entities when the communication path is congested (Para 0003 teaches increasing the token count continuously, and also decreasing the token count dependent on a congestion level).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the combined teachings of Voellm and Bly, since stated in Para 0003 that such a modification will avoid adverse conditions by managing data packet queues, Where excessive queue lengths are avoided.

Regarding claim 21, The combined teachings of Voellm and Bly do not specifically disclose linearly increase the standby token count for each of the plurality of classes of source entities when the communication path is not congested; and

exponentially decrease the standby token count for each of the plurality of source entities when the communication path is congested.

Jeffries discloses linearly increase the standby token count for each of the plurality of classes of source entities when the communication path is not congested; and exponentially decrease the standby token count for each of the plurality of source entities when the communication path is congested (Para 0003 teaches increasing the token count continuously, and also decreasing the token count dependent on a congestion level).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the combined teachings of Voellm and Bly, since stated in Para 0003 that such a modification will avoid adverse conditions by managing data packet queues, Where excessive queue lengths are avoided.

Regarding claim 26, The combined teachings of Voellm and Bly do not specifically disclose linearly increase the standby token count for each of the plurality of classes of source entities when the communication path is not congested; and exponentially decrease the standby token count for each of the plurality of source entities when the communication path is congested.

Jeffries discloses linearly increase the standby token count for each of the plurality of classes of source entities when the communication path is not congested; and exponentially decrease the standby token count for each of the plurality of source entities when the communication path is congested (Para 0003 teaches increasing the

token count continuously, and also decreasing the token count dependent on a congestion level).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the combined teachings of Voellm and Bly, since stated in Para 0003 that such a modification will avoid adverse conditions by managing data packet queues, Where excessive queue lengths are avoided.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER P. GREY whose telephone number is (571)272-3160. The examiner can normally be reached on 10AM-7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moe Aung can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2416

/Christopher P Grey/
Examiner, Art Unit 2416